Field observations of the Red-shouldered Vanga *Calicalicus rufocarpalis*: a newly described Malagasy endemic

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Ny vanga mena soraka na *Calicalicus rufocarpalis* dia karazam-borona vaovao tsy misy afatsy eto Madagasikara. Ny fampitahana sy ny fandinihana natao tamin'ny endrika ivelany sy ny loko ankapobeny dia hita fa tsy mitovy mihitsy amin'ny Todikasaroka Calicalicus madagascariensis ity Vanga vaovao fa tena karazany hafa mihitsy.Bibikely sy fanday na lolo madinika no fotontsakafony. Ary Rehefa mitady sakafo izy dia saika eo anelanelan'y 2 ka hatramin'ny 3 m miala amin'ny tany. Ny vinavina nataonay dia mety misy mpivady misa 20 kahatramin'ny 100 monja no mety misy eo alahain'I St Augustin Toliary eo. Raha io isa io no jerena dia vitsy tokoa nefa ity karazam-borona ity dia mbola tsy fantatra marina ireo toerana mety ahitana azy any amin'ny faritra atsimo andrefan'ny Nosy iny. Angamba mety ho eo amin'ny manodidina ny lembalemban'i Mahafaly fotsiny ihany no mety ahitana azy eto Madagasikara.

Les premières observations sur le terrain du récemment décrit *Calicalicus rufocarpalis* ont montré que son plumage et ses vocalisations le distinguent clairement de son unique congénère, *C. madagascariensis*. L'iris de *C. rufocarpalis* est jaune chez les deux sexes et l'articulation carpienne est coloré de rouge chez la femelle. L'espèce fut rencontrée dans une zone de maquis dominée d'Euphorbias d'environ 30 km² située au sud de Toliara. Les effectifs de cette zone ont été estimés à 20–100 mâles chanteurs. L'habitat favorable s'étend néanmoins sur une superficie beaucoup plus grande, tant vers le sud que vers le nord. La prospection de cette zone constitue une priorité.

The Red-shouldered Vanga *Calicalicus rufocarpalis* was described from two female specimens collected in 1947 near Toliara, south-west Madagascar[1]. In the type-description, Goodman *et al*[1] published a photograph, taken in the same area, of a male *Calicalicus* which was presumed to relate to this species. The type-specimens and the photograph were the only evidence of the species' existence. The purpose of this paper is to confirm the appearance and identification criteria of the new species, including its distinctive call and song, and to give preliminary assessments of its habitat requirements, conservation status and recommendations for further work.

Rediscovery of the species

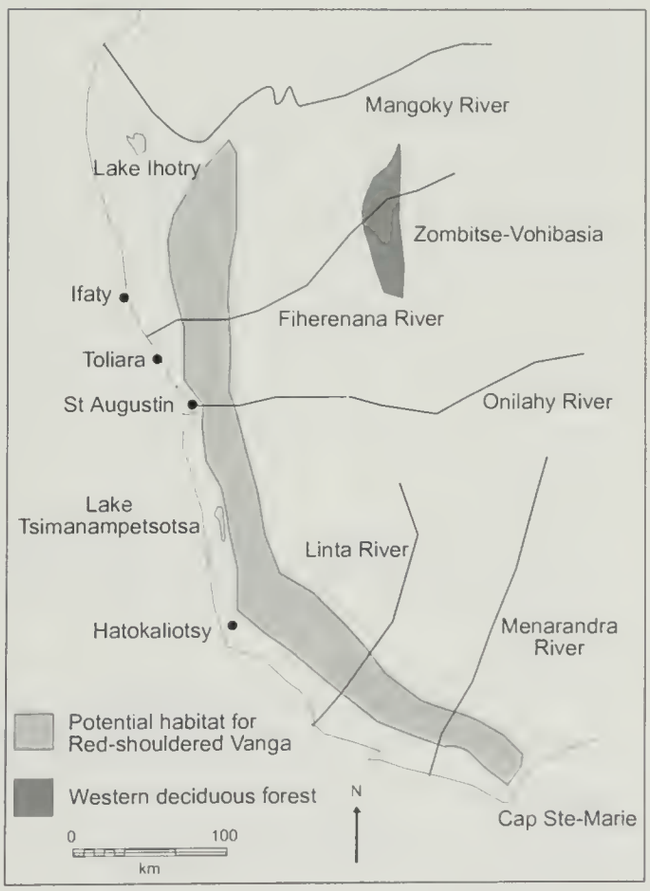
Before the type-description appeared in print, several attempts had been made to find Red-shouldered Vanga in the area where the two specimens had been collected, without success. Following the formal description of Red-shouldered Vanga, field survey workers working for the ZICOMA project (Zones d'Importance pour la Conservation des Oiseaux à Madagascar, the Madagascar Important Bird Areas Project) spent three days in the area looking for the species, between 23–25 July 1997. A total of c9 singing males was located, and photographs of both male and female, and tape-recordings of song and calls were made.

Description and behaviour

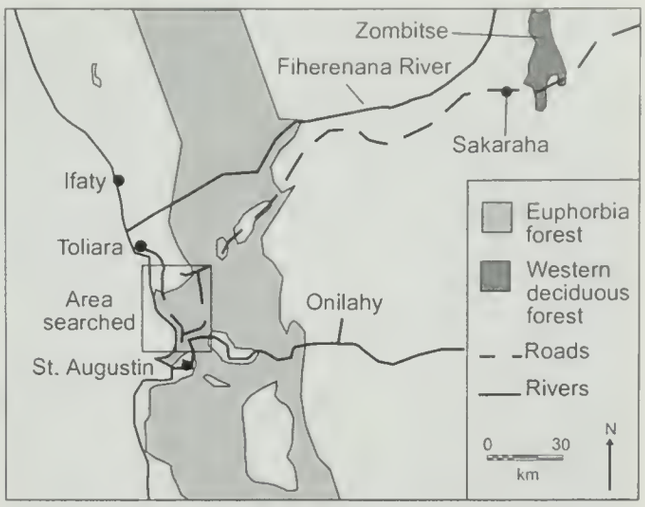
The photograph of a male *Calicalicus* published in the type-description does indeed refer to that of the Red-shouldered Vanga. Male and female Red-shouldered Vangas are both similar to the respective sexes of the Red-tailed Vanga *Calicalicus madagascariensis*. However, there are several significant differences. Most were noted in the original type-description[1], but are clarified here. All comparisons made here are with the respective sexes of Red-tailed Vanga. Both sexes are somewhat larger overall than Red-tailed Vanga, with longer bills, tails and tarsi, shorter wings and pale legs. This gives the bird a rather elongated appearance. Males have a somewhat larger black bib and a brighter narrow white band over the forehead to behind the eye. The whitish cheek patch appears narrower. There is a conspicuous yellow-white iris and rufous on the marginal, lesser median and at least some inner greater coverts, and on some individuals on the inner web of the upper tertial. This red area is limited to the lesser and marginal coverts on Red-tailed. The tail appears duller grey above than Red-tailed, appearing strongly rufous in flight and from below.

The flanks are suffused rufous, as in Red-tailed. The female is quite characteristic, with a pale line over the forehead and eyes, echoing the male's pattern. It has a noticeable, narrow but clearly defined pale eyering and a pale yellow-white iris. There is a conspicuous rufous patch on the lesser coverts, and median coverts in some individuals. The upperparts are a uniform pale greyish brown, with no contrast between the crown and mantle as in Red-tailed. Contrary to the inference in the type-description, the tail appears relatively rufous, especially in flight. Potential confusion of females of this species with the sympatric Archbold's *Newtonia archboldi* and Common Newtonias *N. brunneicauda*, both small pale passerines with pale irides, can be avoided by noting the pale rufous shoulders, red tail and whitish eyering of Red-shouldered Vanga.

Male and female Red-shouldered Vangas forage low in dense dry 2–3 m high *Euphorbia* scrub, calling frequently. Both take small insects, principally by gleaning from leaves and branches, but also by sally gleaning. The male (for which more detailed observations were made) repeatedly appeared to try to flush potential prey by flicking its wings open once or twice. This appeared not to be a display, as it was followed on two occasions by attempted sally gleans.



Map showing potential Red-shouldered Vanga *Calicalicus rufocarpalis* habitat in south-west Madagascar



Map showing area searched for Red-shouldered Vanga *Calicalicus rufocarpalis* near Toliara, south-west Madagascar.

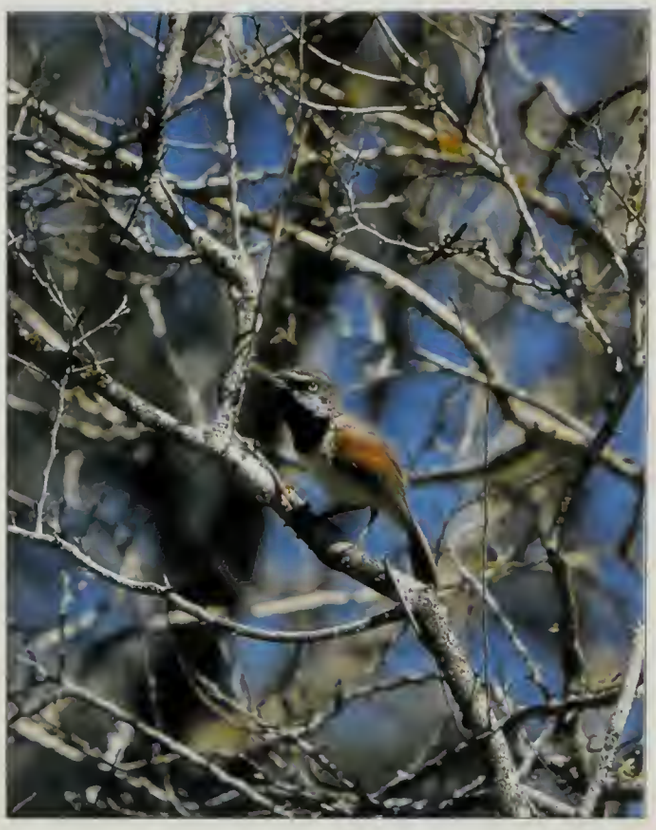
Both sexes held prey in their feet while dismembering it.

Calls

All calls heard from Red-shouldered Vangas differed substantially from those of Red-tailed. The alarm or contact call was a peevish *karr-trkkk*, the initial note like a sunbird, dropping to a low wooden rattle. This was modified into a rolling *kuvoivoikk*, again with a slight rattle at the end, as agitation increased. A different note, possibly a contact call, is a loud, rather beautiful *ksisisisisususu*, a rapid, dropping, rolling cadence with a slight whistling or chanting quality. The song of the male, uttered occasionally when feeding during the heat of the day as well as more regularly in the morning, is a loud *tyuh-tee* or *pu-teer*, the notes of rather similar tone but the second louder and more whistled. At a distance, the second note is more clearly audible and a sounds not unlike the song of the Hook-billed Vanga *Vanga curvirostris*, although shorter.

Distribution and conservation

Male Red-shouldered Vangas were found singing all along the road between La Table and St Augustin (Fig 1). However, the density in this area was low, with probably only one male approximately every 1–3 km of trail. We detected singing birds at distances up to c300 m, so were surveying a swath of land c0.6 km^2 per km of trail. The area of suitable habitat where the species definitely occurs covers c30 km^2, so there are probably between 30–100 pairs in this area. This estimate is based on numbers of singing males in midwinter. Males may be much more vocal during the breeding season, so this density estimate may be too low. The habitat is patchily disturbed, with areas of extraction of timber for charcoal and browse for goats.



Red-shouldered Vanga *Calicalicus rufocarpalis* (P.A.J. Morris)

particularly near the main road and St Augustin. It is probable that many of the larger timber trees have been extracted, some a very long time ago. However, the great majority of the area is generally intact and will probably remain so for the medium-term future, as cultivation on this soil type would be unproductive, and many of the local people are fisherman and goatherds rather than agriculturalists. Nonetheless, if immigrants with different agricultural traditions were to arrive, as has happened in many other forested areas of Madagascar, then the situation could change rapidly and the habitat be lost.

Outside the immediate La Table–St Augustin area, there is a relatively large area of similar habitat inland and to the south. If Red-shouldered Vanga occurs south of Onilahy, then they should occur almost as far south as Cap Ste Marie, 250 km along the crest of the Mahafaly plateau. The species appears to be absent from Cap Ste-Marie itself (pers. obs.). The Mahafaly plateau area includes the Strict Reserve of Tsimanampetsotsa, the only protected area which might hold populations of Red-shouldered Vangas. However, the region around Hatokaliotsy has also been identified as a site of special interest[2] and warrants protected area designation. Clearly, the most urgent priority is for surveys in *Euphorbia* scrub around Tsimanampetsotsa and Hatokaliotsy, and to the north of the main Toliara–Antananarivo road, and a concerted effort to establish density estimates in different habitats and degrees of forest degradation.

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